



INSTRUCTION MANUAL

COMPUTEMP

BLAZER
Corporation

EAST RUTHERFORD, NEW JERSEY

INTRODUCTION

The Blazer "Computemp System" provides a complete packaged air conditioning unit, which offers the ideal environment and operating conditions for Computer Rooms.

Computemp incorporates such features as:

1. Decorative cabinets that blend with the style and colors of computer equipment. No pipes, wires, or ducts need be exposed.
2. All service for the unit may be done from the front.
3. A down-flow design that provides supply air under a raised floor so that the full flexibility of the floor may be utilized.
4. Complete control of temperature and humidity including dehumidification and humidification cycles.
5. Dual components for staged operation which insure uninterrupted conditioning.
6. Two stage high efficiency filtering for the essential cleanliness of computer sites.
7. Minimum of floor space and a maximum of capacity.
8. A complete integral control system with ample pilot lights and safety controls.
9. Completely wired, fused, interlocked and protected power supply.
10. Quality materials and workmanship which offer quiet, dependable long life service. Stainless steel condensate and humidifier pans, copper fin coils with solder bond to the copper tubes and stainless steel coil casings, welded frame and heavy gauge furniture steel panels which are welded and ground smooth before priming and painting.
11. Complete Refrigeration system designed for automatic operation, continuous pump down, and fitted with all required service valves.
12. Units shipped complete with head pressure controls.
 - a) Pressure stabilizers with companion condensers for air cooled operation for all weather conditions.
 - b) Water regulating valves piped and pre-set on water cooled units.

BLAZER CORPORATION, WHOSE POLICY IS ONE OF CONSTANT IMPROVEMENT, RESERVES THE RIGHT TO CHANGE DESIGN AND COMPONENT PARTS TO GUARANTEE THE ULTIMATE IN QUALITY AND PERFORMANCE.

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VISUAL DESCRIPTION

SYSTEM
TEMPERATURE
CONTROLS

SYSTEM SWITCH
& INDICATING
PILOT LIGHTS

POWER
INPUT LUGS

HUMIDIFIER
THERMAL
OVERLOAD

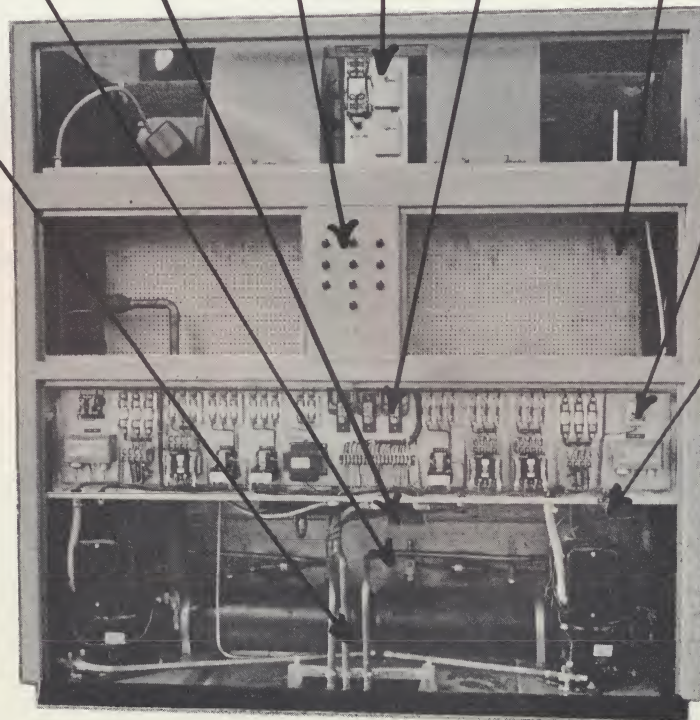
FIRESTAT

REFRIGERANT
CHARGING VALVE

FILTER
SWITCH

REFRIGERANT,
WATER MAKE-UP
& WASTE DRAIN
CONNECTIONS

COMPRESSOR
ALTERNATING
SWITCH



ARRANGEMENT:

The standard unit provides:

Free return to the filters in the top of the unit.

Down flow, supplying air through the base of the unit to below the raised floor.

All service from the front.

All piping and wiring connections through the base of the unit.

Modifications of the standard unit for fresh air and return air connections, other piping connections etc., are available.

Other arrangements for up flow application are also available.

COMPONENT DESCRIPTION:

CABINET — The cabinet is of heavy gauge furniture steel, welded construction with front service panels fitted on neoprene gasket material. Major service panels are fitted with quick acting ratchet pawl fasteners. The interior of the cabinet is lined with 1" glass fiber thermal and acoustic insulation, neoprene coated. The condensate drain pan and humidifier pan is type 302 stainless steel. The discharge duct, electrical control box and compressor pan and support assemblies are fabricated of heavy gauge galvanized steel.

BLOWERS — Two forward curved, double inlet, double width centrifugal fan assemblies are vee belt driven thru two groove cast iron pulleys, and three phase resilient base mounted, NEMA type B, frame size 184, open type, ball bearing motors. Fan shafts are 1" diameter, turned, ground and polished steel coated with rust preventative compound. Fan bearings (four total) are prelubricated wide inner ring ball bearing type, fitted with conductive rubber interliners. Drives are selected at 200% of motor horsepower.

EVAPORATOR COILS: Evaporator coils are direct expansion type having two parallel circuits, stainless steel tube sheets and side channels, complete with an intermediate drain trough. Prime surface is $\frac{5}{8}$ " O.D. size .028" wall seamless copper tubing with helically wound, solder bonded and coated copper fins. Coils are fitted with venturi type pressure refrigerant distributors and single outlet externally equalized, thermal expansion valves with external super heat adjustment. Coils are sized for a maximum 450 FPM face velocity.

HUMIDIFIER — The Evaporative pan type humidifier is complete with stainless steel pan, brass water make-up valve with poly propylene float assembly, pan drain valve and a 4 KW 3 phase immersion type heating element complete with manual reset thermal cut out protector to guard against burn out.

REHEAT — Reheat is two stage — 7.2 KW per stage, 3 phase, forced air duct heaters complete with safety

thermal cut out. Frame assembly of aluminized steel and coil assembly of high grade nickel chrome resistance wire.

COMPRESSORS — Each unit contains two "Copeland" V line welded hermetic motor compressors featuring internal motor isolation, external compressor isolation, anti-slug protection, oil sight glass, oil strainer, internal motor protection and service shut off valves with gauge and control ports.

REFRIGERANT PIPING — All piping is seamless copper tubing, refrigeration grade, type "L". Low side test pressure is 150 PSIG. High side test pressure is 400 PSIG. Liquid lines are fitted with line size combination moisture indicator sight glass, and flare connected, replaceable type, full flow, over size, refrigerant filter — driers and low voltage, quiet operating solenoid valves with moisture resistant coils.

FILTERS — Standard units are supplied with three Farr Company type HP-2-20 x 25 x 8" high efficiency filters. Optional 85% NBS filters can be furnished complete with 2" deep throwaway type pre-filters. The standard unit is equipped with a removable filter section to facilitate service thru the top of the cabinet.

WATER COOLED CONDENSERS — The condenser — receivers on the "W" models are shell and tube cleanable type with all copper water channels, ASME stamped, and fitted with full size relief valves with 300 PSIG setting, and liquid outlet "King" valves complete with $\frac{1}{4}$ " male flare charging port.

RECEIVERS — On "A" models the receivers are sized for use with the pressure stabilizer. They are ASME stamped, and complete with "King" valve, charging port and 400 PSIG system relief valve.

ELECTRICAL PANEL AND CONTROLS

POWER FEED

All power for the unit including the air cooled condenser fans, if used, is to a single three wire feed distribution block in the control center. The lugs will accommodate #1/0 AWG input lines. A 1½ inch knock out is provided in the bottom of the control center for the electrical power feed from under the floor. A ground lug is provided for use when required.

Individual fuse protection is provided for each branch circuit to motors, heaters, or controls.

CONTROL CENTER

The internally mounted control center across the front of the unit contains the following:

The power distribution block and branch circuit fuse panels.

Low voltage control transformer.

Magnetic motor starters and contactors. On air cooled units, the condenser starters are installed and wired with a ¾" KO furnished for each line from the starters to the safety switches furnished and mounted on the companion condenser.

Auxiliary contacts are provided on each compressor starter for cooling tower units for starting the tower pump and fan.

Control circuit transformer for 24 volt control circuit power.

Numbered terminal strips for control connections.

A compressor alternating switch with a center off position for service pump-down.

Filter switch to light the pilot light indicating clogged filters.

Refrigerant dual pressure controls.

CONTROLS — Temperature and humidity sensing controls are located in the fan chamber on standard units. Remote panels containing the sensing controls and pilot lights can be provided when required. Standard controls consist of the following:

Four stage heating-cooling thermostat.
High and low limit humidistats.
High return air temperature thermostat.
Firestat.

SWITCHES AND PILOTS — The front center panel is fitted with the following switch and low voltage pilot lights:

A fan switch to start and stop the unit.

Power on pilot light.

Fan on pilot light.

Reheat stage #1. Pilot Light.

Reheat stage #2. Pilot Light.

Dehumidify pilot light.

Stage #1 - Cooling Pilot Light.

Stage #2 - Cooling Pilot Light.

High Return Air Temperature Pilot Light.

Humidify pilot light.

Change filters pilot light.

The compressor sequence and pump-down switch is located in the main panel.

MANUAL RESET CONTROL — The following controls will lock out and must be manually reset:

The supply fan magnetic starter overloads.

The firestat will stop the entire unit and it must be manually reset if the return air temperature exceeds the setting of the control.

The filter switch will turn the pilot light on and must be manually reset each time it is tripped by excessive pressure drop across the filters.

High pressure cut out on the dual pressure control.

On air cooled units, the magnetic motor starters in the control center for the condenser fans must be manually reset if they are overloaded.

Water cooled units with cooling towers will have magnetic motor starters with overloaded reset buttons, usually near the tower or pump.

Humidifier thermal cut out.

STANDARD WARRANTY

Blazer Corporation warrants Computemp Units for a period of one year from date of shipment to be free of defective materials and workmanship. Replacement of parts and materials will be made by the Blazer Corporation, subject to our inspection and F.O.B. East Rutherford, N. J., U.S.A. with the following exceptions:

Fan motors are covered by the original manufacturer of same and should be repaired or replaced by the local authorized repair station.

Compressors are covered by the warranty of the Copeland Refrigeration Corporation and it is suggested that the local wholesaler be contacted for both in and out of warranty compressors to save freight and handling charges.

Vee belts and filters are not covered under this warranty.

Blazer does not participate in any refrigerant or labor expense incident to the replacement of any parts under this warranty.

AIR COOLED CONDENSER:

The dual air cooled condensers are fabricated of heavy gauge galvanized steel with easily removable side service panels. Two separate and independent condensers are provided in a common cabinet. Each condenser is equipped with its own fan, motor, drive and service disconnect switch, pre-wired.

Fans are of the forward curved, double inlet, double width, centrifugal type, selected for maximum efficiency and minimum noise level. Fans are hot dipped galvanized steel construction, complete with heavy duty ball bearings, quiet operating three phase motors, and vee belted, thru two groove cast iron pulleys.

Condenser coils are galvanized steel casings with 5/8" O.D. x .028" wall thickness, copper tubing and helically wound, solder bonded, aluminum fins spaced at 9 fins per inch maximum.

Fan discharges are fitted with galvanized steel protective bird screens. Standard condensers are any of three basic configurations.

- 1) Horizontal coil air flow, horizontal fan discharge.
- 2) Horizontal coil air flow, and vertical up blast air discharge.
- 3) Vertical coil air flow, and vertical up blast fan discharge. Matching legs of 30" to 48" height as required.

Other condenser configurations are available.

GENERAL SPECIFICATION

COMPONENTS	Model Numbers			
	80W	80A	100W	100A
CFM @ 0.20" Ext. S.P.	3800	3800	4500	4500
MBH Cooling	87.00	82.00	116.0	111.0
MBH Heating	48.5	48.5	48.5	48.5
KW Heating (2) Per Unit	7.2	7.2	7.2	7.2
KW Humidifier	4.0	4.0	4.0	4.0
Humidifier Capacity (per hour)	13 lbs. water	13 lbs. water	13 lbs. water	13 lbs. water
Fan Motor H.P.	1½	1½	2	2
Compressor H.P.	(2) 3	(2) 3½	(2) 4	(2) 5
GPM Condenser 85°F Entering, 95°F Leaving	GPM total 22.6		GPM total 30.2	
P.D. - PSIG (Includes Water Regulating Valve)	5.7		11.0	
*Max. FLA @ 208 V. 3 PH. 60 CY.	87.5	96.7	98.1	116.9
Refrigerant LBS-R-22	Total 21		Total 27	
PIPE CONNECTIONS				
Condenser Water	1¼" I.P.S.	1¼" I.P.S.	1¼" I.P.S.	1¼" I.P.S.
Condensate Waste Line	¾" O.D.	¾" O.D.	¾" O.D.	¾" O.D.
Humidifier Water Make-Up	¾" O.D.	¾" O.D.	¾" O.D.	¾" O.D.
Operating Weight - Lbs.	1790	1750	1810	1850

*Includes Remote Condenser (air cooled) Fan Motors

MODEL NUMBERS:

SUFFIX "A" Denotes—with air cooled condenser
SUFFIX "W" Denotes—with water cooled condenser

Physical Unit Dimensions—33½" W. x 76" L. x 84" H.
(Includes Removable Filter Section)
(74¾" Actual Shipping Height)

Standard unit power supply is 208/220 Volt, 3 Phase, 60 C.P.S.

Optional voltage is 440/480 Volt, 3 Phase, 60 C.P.S.

Units for 50 C.P.S. operation are available in models 80W - 100W and 100A at 85% of rated capacity.

INSTALLATION:

The following provision should be made for the installation:

1. Be sure that the unit can be moved into the site through the elevators, hallways, and doorways.
2. Electrical power wiring must be provided with the required circuit breaker or disconnect switches to the distribution block. The six (6) wires must be run to the air cooled condensers or the two (2) tower fan and pump interlock wires run if required. Local codes must be followed. Minimum service should be 125 amp. 208 V-60-3 for "A" units and 100 amp for "W" units.
3. Refrigerant piping must be run to air cooled units as shown under refrigerant piping.
4. City water or cooling tower water must be provided water cooled units.
5. A gravity drain or condensate pump must be provided for removal of condensate or for overflow of the humidifier. Local codes must be followed. A gravity drain should be at least 1¼" pipe size.
6. A ½" water supply with shut off valve is to be connected to the ¾" humidifier line provided.
7. On raised floor installation, all piping and wiring should enter the unit through the bottom in the one square foot area.
8. The air discharge duct opening in the floor must conform to the size and location shown on drawing number C-5719-R2.

REFRIGERANT PIPING — AIR COOLED UNITS

Compressor discharge line connections (2) ⅞" O.D., and condenser liquid return lines, (2) ⅞" O.D. are located in the front center section of the unit and are to be connected to the remote companion condensers thru the head pressure control stabilizers furnished with each air cooled unit. Application form number 8142 is enclosed with each stabilizer unit and must be adhered to and in strict accordance with same.

It is suggested that a gauge port be installed in the discharge line at the stabilizer location for installation of a service gauge while adjustments are made.

The stabilizer should be mounted in a vertical position and must be above the receiver and below the condenser outlet. Mounting brackets are furnished on the stabilizer.

A secondary line check valve (not furnished) must be installed in the line between the "liquid out" connection and the receiver. For adjustment refer to form #8142.

Piping — all refrigerant piping used must be hard drawn "refrigeration" grade type "L" clean and dry. All joints should be silver or phoscopper brazed with the introduction of dry nitrogen while brazing. Piping should conform to all local and state codes. Vibration isolators are not required.

The high side must then be pressure tested at 400 PSIG followed by evacuation with a first grade vacuum pump to assure a clean, dry system.

It is suggested that the system be evacuated thru both the high and low side simultaneously from the compressor gauge connection ports and that the vacuum be pulled to 150 microns. After evacuation the vacuum should be broken with refrigerant and the operation repeated.

With the system now being clean and dry the system may be charged with refrigerant #22 which may be introduced as a liquid directly into the system thru the port furnished on the liquid line stop valve.

Prior to charging, the supply air fan must be energized and direction of rotation checked.

On air cooled units the condenser fan rotation must also be checked.

Do not charge refrigerant into the system unless the supply air fan is operating and fan chamber panels are installed. To open liquid line solenoids the thermostat may be by-passed by number 11 to terminals 13 and 14. (Check wiring diagram shipped with equipment).

Prior to closing the power supply circuit the voltage must be checked and in accordance to the system design and nameplate requirements.

The humidifier drain valve should be closed and the pan filled with water to the overflow stand pipe level. A slight adjustment of the float assembly rod may be required.

All service valves and any line valves on inter-connecting condenser piping must be opened.

On water cooled units the condenser water supply must be checked.

A complete check of operating conditions should be made at normal room temperatures, and all field adjustments and checks made of operating and safety controls.

INSTALLATION & OPERATION OF PRESSURE STABILIZERS

Mounting brackets are provided on the units to facilitate installation of the basic unit itself. Such brackets were not designed to support interconnecting piping to and from the 'PS'. All interconnecting piping must be independently supported. Failure to adhere to this practice will void the warranty.

Ambient temperature does not affect operation of the pressure stabilizer.

The pressure stabilizer may be mounted in either a horizontal or vertical position and both it and the receiver must be below the liquid outlet of the condenser. Whenever possible, it is recommended that the pressure stabilizer be mounted vertically with the "Liq. In" located above the "Liq. Out" connection.

The "liquid inlet" is connected to the liquid line running from the condenser outlet. The "liquid outlet" is connected to the receiver. The "gas inlet" is connected to the compressor discharge line.

On systems where the receiver is located in a warmer ambient temperature than the condenser and pressure

stabilizer, a secondary check valve (not supplied) should be installed in the liquid line between the "Liq. Out" connection, and the receiver. If the pressure stabilizer is located in the equipment room, this secondary check valve should be installed in that section of the liquid line nearest to the cold outside ambient — this will prevent sweating of the liquid line during off cycle operation and maintain proper receiver pressure.

ADJUSTMENT

The regulating valve must be adjusted while system is in operation. As the adjustment screw is tightened (clockwise rotation), valve spring tension increases and the valve will move toward a closed position (this means that more head pressure will be required to open the valve and thus by-pass the heat transfer section).

Before the system is started, the regulating valve should be adjusted to the open position (counter-clockwise).

With the system in operation, the adjusting screw should be run in gradually until the desired operating head pressure is obtained.

NOTE

If the desired operating head pressure cannot be obtained by adjusting the screw, additional refrigerant must be added to the system until the head pressure rises to the desired operating level and can be modulated by rotating the adjustment screw in and out. Allow sufficient time for the system to stabilize after each screw adjustment.

Important — A clear sight glass is not necessarily a positive indication of proper system charge

A proper refrigerant charge is indicated ONLY when regulation of the adjustment screw produces the required head pressure modulation. For best operating results, the final adjustment of the valve should be made at a time when the outside temperature is at or closest to the lowest ambient temperature anticipated.

Non-condensable gases must always be purged from the condenser and receiver to insure normal head pressure during summer operation.

SERVICE AND MAINTENANCE:

LUBRICATION: All bearings used on fans and motors are of the prelubricated, wide inner ring ball bearing type and require no further lubrication. Panel latches: Two or three drops of light machine oil annually on the threads of the moving pawl.

VEE BELTS: Belt dressing should never be used. Tension should be checked periodically and adjusted as required. Drive alignment is essential to long belt life and should be maintained. When replacing worn belts always replace in matched pairs and never pry belts over the pulleys; loosen the motor take-up bolts to install new vee belts.

HUMIDIFIERS: Wash down the condensate and humidifier pans weekly and flush the pan. Flush with clean water and refill. If scale deposits build up on the inner surfaces a mild caustic solution may be used with a stiff brush to remove the scale. Check operation and adjustment of float valve.

COMPRESSOR: The compressor alternating sequence switch on the power control panel should be reversed periodically to equalize the compressor wear. No other service should be performed on the compressor or refrigeration cycle except by qualified refrigeration personnel.

AIR FILTERS: Pre-filters should be checked and changed at frequent intervals. High efficiency filters should be changed when the clogged filter pilot light turns on. A new set of High Efficiency filters should be in local stock before they are needed. The filter switch should be set to turn on when the high efficiency filters reach .50" static pressure loss. When 85% filters are used, the filter light should be adjusted to turn on at .65" static pressure.

WATER REGULATING VALVES: should be manually flushed occasionally by lifting the range spring follower with screwdriver at two sides of lower spring cap to open valve. Adjustment should be made by qualified person only. Valves should be set for a 210 pound head pressure.

HUMIDSTATS: Do not touch the hair element. This may be cleaned with a soft brush dipped in ether, if any dust accumulation is noticed. Do not attempt to calibrate or

repair. Return to factory for service. Set high humidity control at 55% and low humidity control at 40%.

THERMOSTAT: Four stage. Do not attempt repair or calibration. Return to factory as this is a factory set fixed differential-ambient compensated control built to exacting specification. (Set at 72°).

PILOT LIGHTS: It is suggested that the pilot light bulbs be inter changed periodically to check operation. Bulbs can be removed through the front by pulling off the 1" dia. friction fit lens cap. Press the bulb in and turn 45° to remove.

Note: Some units are furnished with 11/16" dia. screw cap lenses.

CONDENSER, AIR COOLED — A periodic inspection of the remote condenser should be made and the vee belt drive adjustment checked. Condenser coils should be hosed down with water to remove the dirt and dust accumulation which acts as an insulator and will seriously effect the condenser performances.

REFRIGERATION CYCLE — Inspection of the refrigeration cycle should be made at frequent intervals to check for leaks, loss of refrigerant, dryness of refrigerant, compressor oil charge and general operation. The refrigerant liquid lines are fitted with combination moisture indicator-sight glasses which show the dryness of refrigerant and system charge. The indicator should always show blue in color and without any indication of bubble when system is in operation. The compressors are fitted with a sight glass in the crankcase to observe the crankcase oil level which should always be at least one half the glass.

If any irregularities are noted service personnel should be contacted.

FIRESTAT: The firestat should be set at 115° to cut off the system in case of fire. It must be manually reset.

RE-HEAT: Each of the two re-heat elements is provided with an automatic reset high limit control mounted under the heater cover. This control should be set at 200°.

HI-RETURN AIR TEMPERATURE: This panel mounted control is factory set to turn on the pilot light when the return air temperature reaches 78°.

TROUBLE ANALYSIS:

SUPPLY FAN NOT OPERATING

1. Check power supply and fuses
2. Check system switch
3. Check fire-stat — (manual reset) in upper right side of coil section. Fire stat should be set to trip at 115°F.
4. Check thermal overloads on supply fan starter. If overload is tripped the current draw of the motor must be checked against motor nameplate amperage. If the motor is drawing in excess of nameplate amperage, a check of the air balance should be made.

HUMIDIFIER NOT OPERATING

1. Check power supply and fuses
2. Check pan water level, water make-up valve and feed water line stop valve.
3. Check pan drain valve for tight closure
4. Check thermal overload element junction box located below humidifier pan.
5. Check "low limit" humidistat

REHEAT NOT OPERATING

1. Check power supply and fuses
2. Check setting and operation of thermal safety control in compressor compartment. Terminal box cover

must be removed for inspection.

COMPRESSOR SHORT CYCLING

1. Remove compressor fuses and have qualified service personnel check refrigerant system.

OR

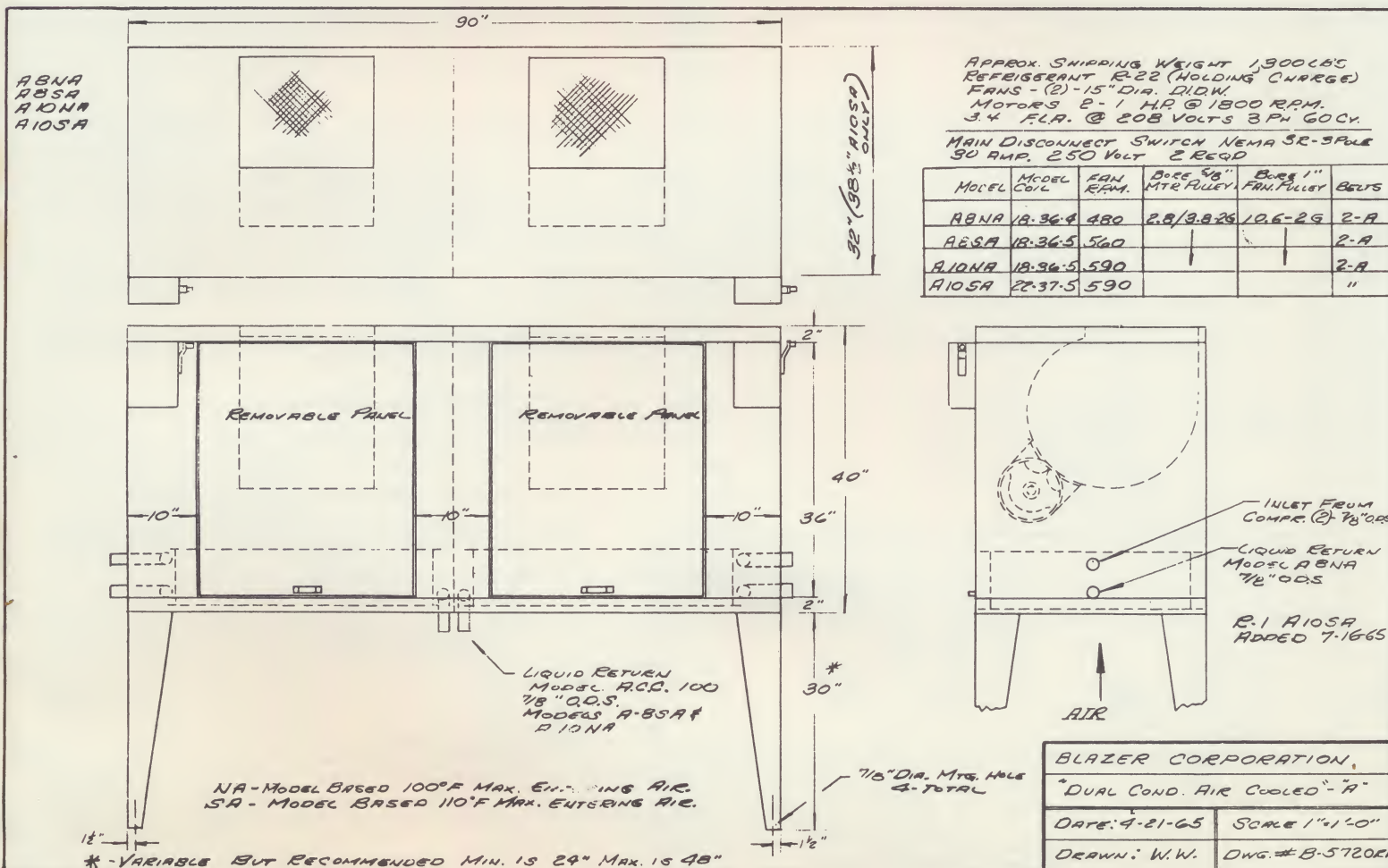
COMPRESS NOT OPERATING

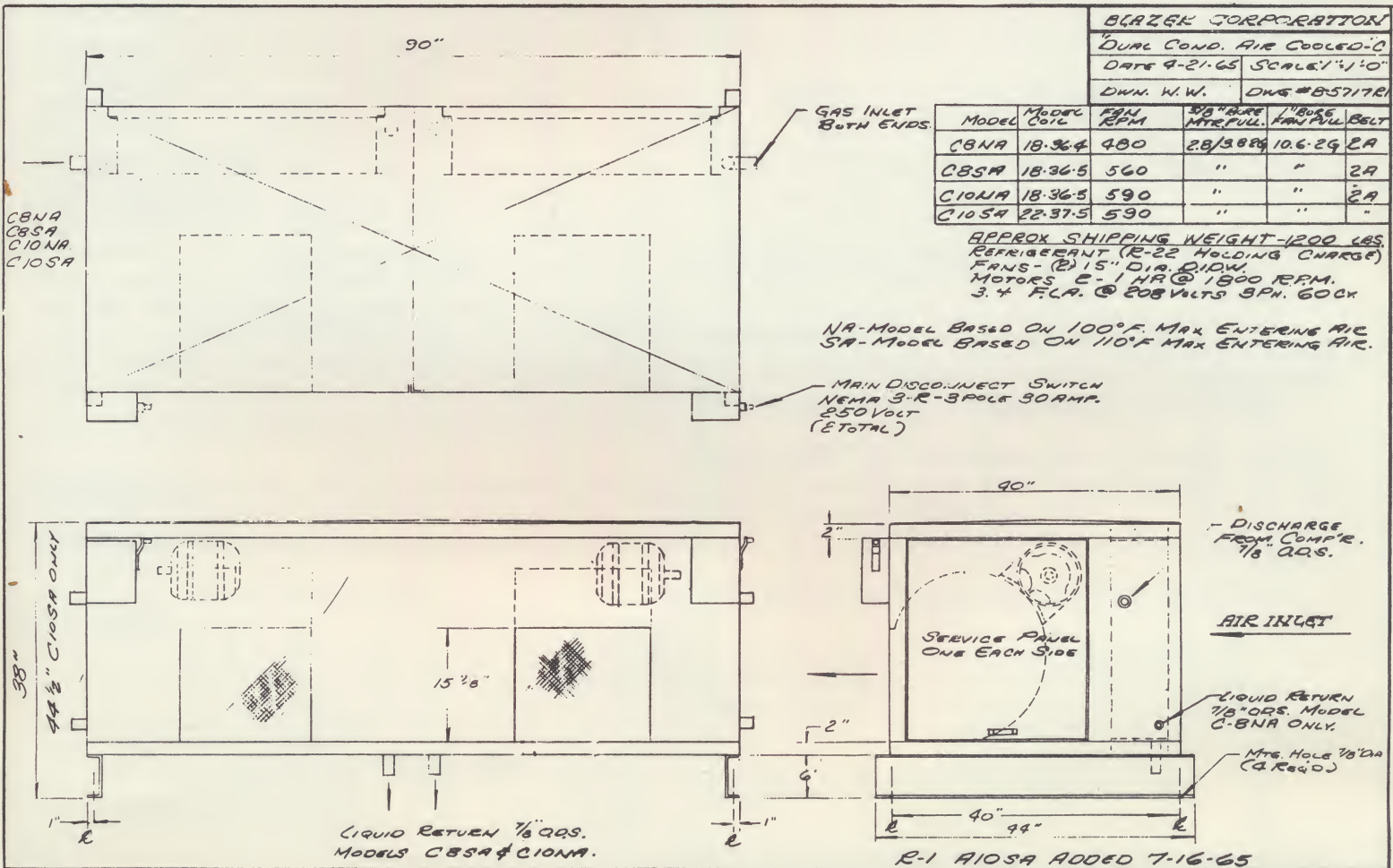
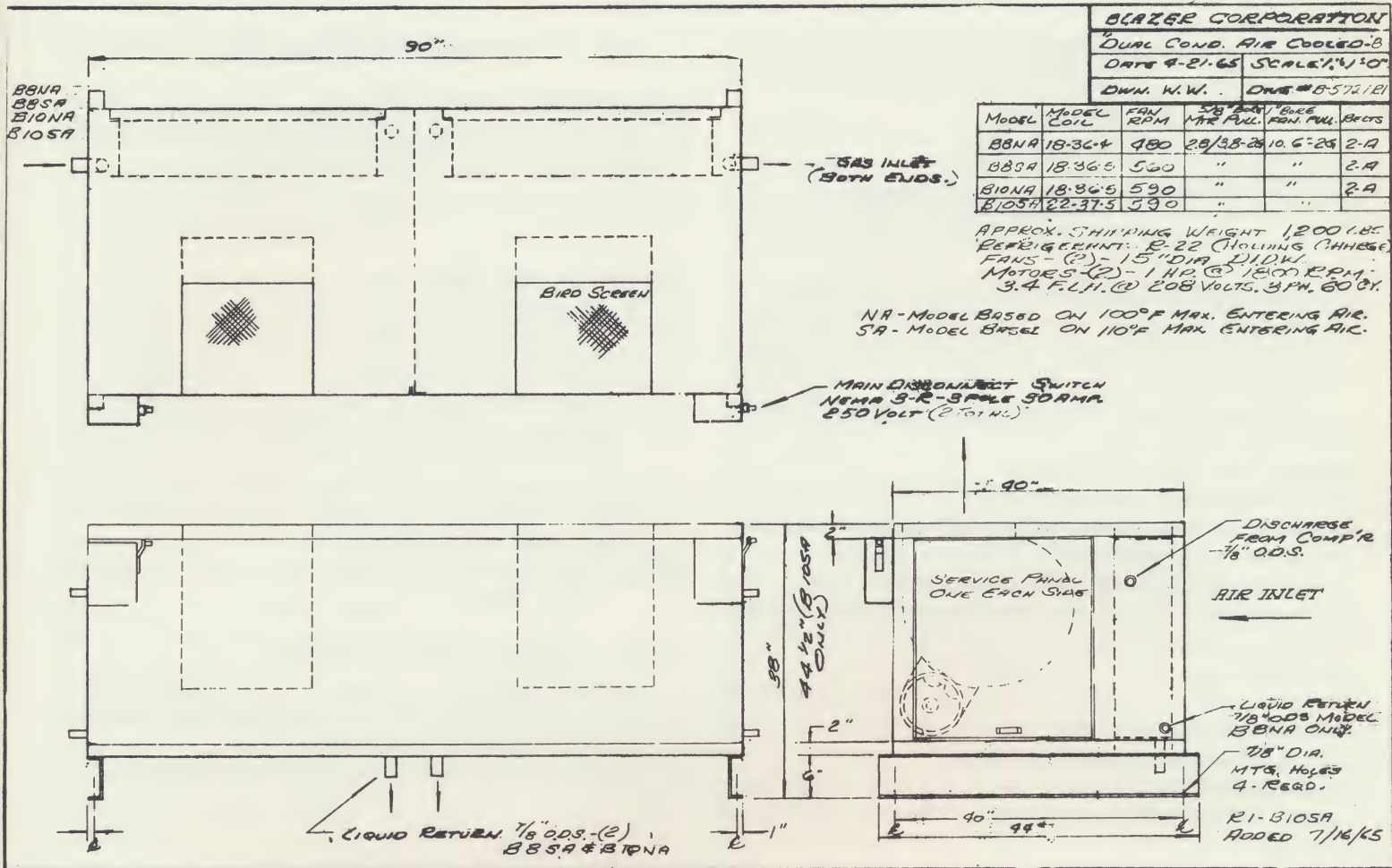
1. Check power supply and fuses.
2. a. Check condenser water supply
b. Check air cooled condenser for power supply
c. Push manual reset button on refrigeration dual pressure control. If compressor runs for short duration and stops call qualified service personnel and remove branch circuit fuses.
3. Check compressor alternating sequence switch located under electrical control panel.

NOTE: This switch has a center off position for service pump down.

FILTER CHANGE LIGHT STAYS ON

1. Change filters
2. Turn reset knob clockwise on filter flag indicator located in control enclosure.
3. Check the static pressure drop across the filters.



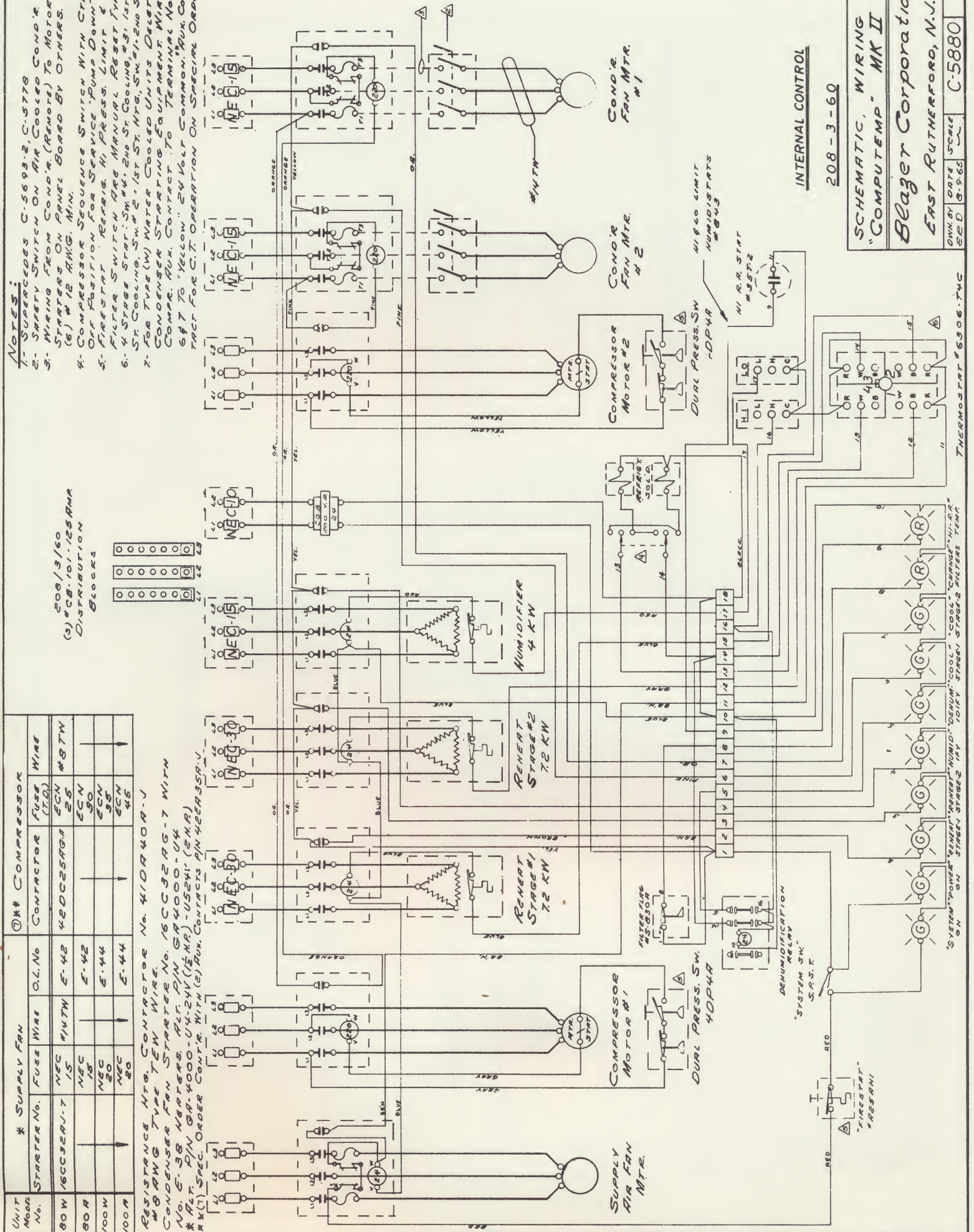


UNIT Model No.	* SUPPLY FAN			① * COMPRESSOR		
	STARTER No.	FUSE	O.L. No.	CONTRACTOR	FUSE (I.Q.)	WIRE
80 W	16CC32AJ-7	N/C	E-42	42DC25AG-1	ECN	#8 TW
90 A		N/C	E-42		ECN	
100 W		N/C	E-44		ECN	
100 A		N/C	E-44		ECN	

RESISTANCE HTG. CONTACTOR No. 410R40A-J
 #8 AWG TYPE TEN WIRE.
 CONDENSER FAN STARTER No. 16CC32AG-7 WITH
 No. E-38 HEATERS. PLT. PN GR4000-04
 * PLT. PN GR4000-04-24V (1/2 HP) - U5241 (24A)
 * X(1) SPEC. ORDER CONTR. WITH (2) RUN. CONTACTS PN42R35P-J

- NOTES:**
- 1- SUPERCEDES C-5693-2 C-5778
 - 2- SAFETY SWITCH ON AIR COOLED COND.'S
 - 3- WIRING FROM COND.'S (REMOVE) TO MOTOR STARTERS ON PANEL BOARD BY OTHERS.
 - 4- COMPRESSOR SEQUENCE SWITCH WITH CTR. OFF POSITION FOR SERVICE "PUMP DOWN".
 - 5- FIRESTAT - REPAIR. H. PRESS. LIMIT & FILTER SWITCH ARE MANUAL RESET TYPE
 - 6- 4 STAGE STAIR: SW #4, 2ND ST. COOLING #3, 1ST ST. COOLING, SW #2, 1ST ST. HTG, SW #1, 2ND ST. FOR TYPE (W) WATER COOLED UNITS. DELETE CONDENSER STARTING EQUIPMENT. WIRE COMP. AUX. CONTACT TO TERMINAL NO. 6 & 7 TO "YELLOW" 24 VOLT COMMON. AUX. CONTACT FOR C.T. OPERATION ON SPECIAL ORDER

208/3/60
 (3) * CB-101-125RMA
 DISTRIBUTION
 BLOCKS



INTERNAL CONTROL

208-3-60

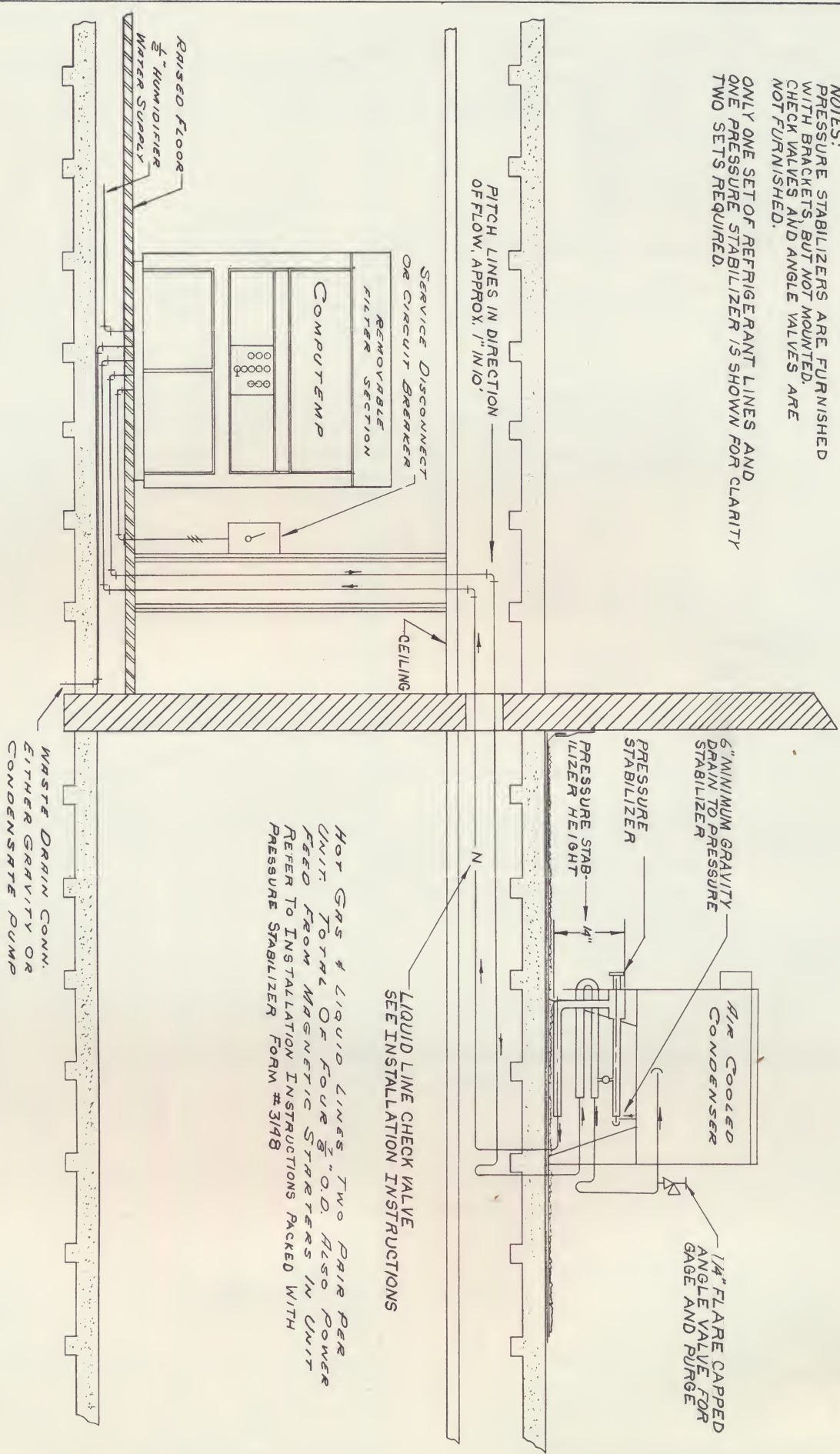
SCHEMATIC, WIRING
 "COMPUTEMP" MK II
 Beagler Corporation
 EAST RUTHERFORD, N.J.

OWN BY DATE SCALE
 SED 8-9-65

THERMOSTAT #6306-74C

NOTES:
PRESSURE STABILIZERS ARE FURNISHED WITH BRACKETS, BUT NOT MOUNTED. CHECK VALVES AND ANGLE VALVES ARE NOT FURNISHED.

ONLY ONE SET OF REFRIGERANT LINES AND ONE PRESSURE STABILIZER IS SHOWN FOR CLARITY TWO SETS REQUIRED.



REFRIGERANT PIPING
COMPUTEMP "A"

SUPPLEMENTS

COMPUTEMP

BLAZER CORPORATION 400 Paterson Plank Road • East Rutherford, N. J. 07073

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COMPUTEMP BY **BLAZER**

400 PATERSON PLANK ROAD • EAST RUTHERFORD, N. J.

Corporation

COMPUTER ROOM ENVIRONMENTAL UNIT(S)

- A. The unit(s) shall be of the down flow type, designed to deliver air properly conditioned to the area from between the sub and raised floor, and to the spaces thru grilles provided in the raised floor. The unit shall be of not less than #14 U.S. gauge furniture, steel construction with a base of 1/8" steel and finished in a color and texture matching the computer cabinets. The unit shall have full front access and be fully serviceable allowing the unit to be positioned to within 1/4" from the wall. The unit shall be completely self-contained having an integral, concealed but serviceable control panel sensing return air (actual space) temperature and humidity bringing on cooling or heating in two stages, humidification or dehumidification and a front control panel fitted with operational pilot lights to indicate the functioning system components as well as need for filter change, high return air temperature warning, audible alarm with silencing switch, system switch, and indicating operation and power on light. Units shall be Blazer Computemp or specifically approved equal.
- B. Compressors: shall be of the hermetically sealed type, complete with internal motor protection, line service shut off valves and gauge ports, crankcase sight glass, anti-slug protection, and internal and external vibration insulation. A lead and lag compressor sequencing switch shall be furnished to alternate compressor wear and have a center off position for service pump down.
- C. Refrigerant Circuit: shall be complete with liquid line solenoid valves, filter-drier, moisture indicator-sight glass, thermal expansion valve with external equalizer and line shut off valve with charging port. Refrigerant shall be F-22.
- D. Evaporator Coil: shall be minimum 6 rows and of copper tube 5/8" o.d. and not less than .028" wall thickness with solder bonded copper fins maximum 8 fins per inch, and having stainless steel tube supports and casing and two separate refrigerant circuits. Coils shall be of the same manufacturer as the unit, with maximum of 450 FPM face velocity.
- E. Drain Pan: shall be of all stainless steel construction with non-ferrous connections.

- F. Humidifier: shall be of the evaporative pan type having a 3-phase immersion heating element with manual reset safety control, brass float valve assembly and stainless steel pan with non-ferrous connections.
- G. Motors (all): shall be 3-phase NEMA design "B" 40 degrees continuous rated and resilient base mounted. Motors shall be 1750 RPM. Adjustable V-belt drive shall be sized for 200% of BHP for ___V 3-phase.
- H. Reheat: shall not be less than two stages and of the chrome-nickel resistant grid type, 3-phase and fitted with thermal overheat protection, and a minimum of ___K.W. per stage.
- I. Filters: shall be of the 4" deep "throwaway" type, having an NBS rating of not less than 45%.
- J. Electrical Control: all branch circuits shall be individually fuse protected and shall include a low voltage control circuit transformer. All magnetic starters shall have a 3-line, 3 coil ambient compensated over-load protection with manual reset. The refrigerant cycle shall operate on a continuous pump down cycle and be fitted with a low and high pressure cut-out switch with manual reset on high pressure cut out. All line voltage wiring shall be in steel conduit. No wiring shall be of less than #18 A.W.G. for low voltage or #14 A.W.G. size for line voltage.
- K. Capacity: each unit shall have a capacity of (____BTU cooling and ____BTU heating). Computemp units as made by the Blazer Corporation.
- L. Finish and Color: shall match the Computer cabinets in all respects.
- M. Condensers (Air Cooled): shall be of the same manufacturer as the Unit, sized to match the unit and having centrifugal quiet operating fans, V-belted thru two groove drives with cast iron pulley to 3-phase NEMA design B-40 degrees C. continuous duty 1750 RPM Motors. Motors shall be prewired to NEMA 3-R rain tight safety switches on the exterior of the unit. Coils shall be copper tube, aluminum fin solder bonded and not more than 9 fins per inch or less than .028 wall thickness tubing. Each condenser shall be dual having two separate and independent coils, fans, motors, drives, safety switches and furnished with low ambient head, pressure control capable of operating down to 0 degrees F. ambient temperature.

Condensers (Water Cooled): shall be of the shell and tube cleanable type, having all non-ferrous water channels complete with system relief valve, liquid line stop and charging valve and factory piped water regulating valves, piped as to allow for easy removal in the field for service. All steel to non-ferrous pipe connections are to be broken by the use of dielectric unions. Condensers shall be A.S.M.E. coded pressure vessels.



I'M FROM MISSOURI, PROVE IT!

And so we did.

The Missouri Farmers Association of Columbia, Missouri needed computer room air conditioning to control the environment in their new data processing center.

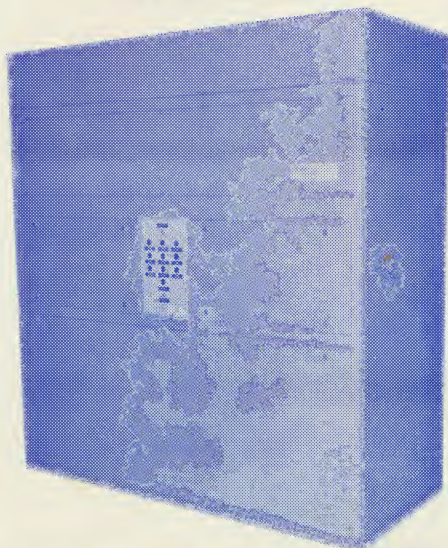
Naturally, before selecting such exacting equipment, they had to "Shop" and compare different manufacturers units. The Association wanted quality, they wanted to make certain the piece of equipment they were to choose would include all the important features, such as:

1. A down-flow design that provides supply air under raised floors, thus allowing the full flexibility of the floor to be utilized.
2. Complete control of temperature and humidity, including dehumidification and humidification cycles.
3. Dual components for staged operation which insured uninterrupted conditioning.
4. Minimum use of floor space and a maximum of capacity.
5. Two stage, high efficiency filtering for the essential cleanliness of computer sites.
6. All service to the unit can be done from the front.
7. A complete, integral control system with all the necessary pilot lights and safety controls.
8. Quality materials and workmanship, which offer a quieter, more dependable and longer life system.
9. Decorative cabinets that blend perfectly with the styles and colors of computer equipment, (no pipes, wires or ducts need be exposed).

After careful study, a Blazer Computemp Systems unit was selected. It had all of the features required.

If you are planning a computer room, and you're from "Missouri", or any other place for that matter, contact us. We'll prove to you that Computemp Systems is the answer to your computer room environmental problems. Or, send for our brochure on Computemp.

WE DID!



COMPUTEMP BY BLAZER

400 PATERSON PLANK ROAD • EAST RUTHERFORD, N. J.

Corporation

BLAZER *Corporation*

400 Paterson Plank Road • East Rutherford, N. J. 07073



January 19, 1967

T. NELSON, SYS. CONS.
BOX 1546
POUGHKEEPSIE
NEW YORK 12603

Dear Mr. Nelson:

Enclosed you will find literature concerned with our Computemp computer room air conditioning systems.

Please note that the controls and operation indicating board are completely integral with the unit; remote wiring is not required. The thermostat and humidistat, which are located within the unit, are of the non-adjustable type (although they can be recalibrated in the field) so that the settings cannot be changed by operating personnel. The units are available in any color and finish to contrast with, or match, the computer equipment.

Our experience in designing computer room air conditioning dates back to 1957, when we pioneered in, and introduced, the first packaged computer room unit of the downflow type, using the raised floor plenum for air distribution in 1961.

We believe our Computemp unit to be the finest on the market today and worthy of being placed alongside any computer made. It is of heavy duty construction; designed to operate continuously 24 hours a day, 365 days per year, with a minimum of maintenance.

If we can be of any assistance to you, please feel free to call us at anytime.

Very Truly Yours,
BLAZER CORPORATION

A handwritten signature in blue ink that reads "Robert P. Dimetrosky".

Robert P. Dimetrosky
Director of Advertising

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ATTENTION: DIRECTOR OF ADVERTISING

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☐ YES ☐ NO

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OTHER

2: IS PURCHASE OF THIS TYPE OF PRODUCT PLANNED?

☐ YES ☐ NO

IF YES, FOR WHAT APPLICATION?

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